

Dkt. 1567/73236/JPW/AG

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Abraham Loyter et al.
Serial No.: 10/511,990
Filed : October 21, 2004
For : ANTI-NLS SCFV AND PEPTIDES AND USES THEREOF
IN NUCLEAR IMPORT INHIBITION

1185 Avenue of the Americas
New York, New York 10036
July 28, 2005

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Commissioner for Patents
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Alexandria, VA 22313-1450

Sir:

INFORMATION DISCLOSURE STATEMENT

In accordance with the duty of disclosure under 37 C.F.R. §1.56, applicants direct the Examiner's attention to the following disclosures (**Exhibits 1-50**) which are listed on Form PTO-1449 (**Exhibit A**).

1. WO 99/28338, issued June 10, 1999 (Exhibit 1);
2. WO 00/49038, issued August 24, 2000 (Exhibit 2);
3. Adam, S.A. et al., (1992) Nuclear Protein Import Using Digitonin-Permeabilized Cells, *Methods in Enzymology*, 219, pp:97-110 (Exhibit 3);

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Filed : October 21, 2004
Page 2

4. Agostini, I. et al., (2000) Heat-Shock Protein 70 Can Replace Viral Protein R of HIV-1 during Nuclear Import of the Viral Preintegration Complex, *Experimental Cell Research*, 259, pp:398-403 (Exhibit 4);
5. Baeuerle, P.A., and D. Baltimore, (1988) I kB: A Specific Inhibitor of the NF- κ B Transcription Factor, *Science*, 242, pp:540-546 (Exhibit 5);
6. Bailey, T.L. and C. Elkan, (1994) Fitting a Mixture Model by Expectation Maximization to Discover Motifs in Biopolymers, *Proceedings of the Second International Conference on Intelligent Systems for Molecular Biology*, pp:28-36 (Exhibit 6);
7. Baldrich-Rubio, E. et al., (2001) A Complex Human Immunodeficiency Virus Type 1 A/G/J Recombinant Virus Isolated from a Seronegative Patient with AIDS from Benin, West Africa, *Journal of General Virology*, 82(Pt.5), pp:1095-1106 (Exhibit 7);
8. Bouyac-Bertoia, M. et al., (2001) HIV-1 Infection Requires a Function Integrase NLS, *Molecular Cell*, 7(5), pp:1025-1035 (Exhibit 8);
9. Broder, Y.C. et al., (1997) Translocation of NLS-BSA Conjugates into Nuclei of Permeabilized Mammalian Cells Can Be Supported by Protoplast Extract: An Experimental

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System for Studying Plant Cytosolic Factors Involved in Nuclear Import, *FEBS Letters*, 412, pp:535-539 (Exhibit 9);

10. Bukrinsky, M. et al., (1992) Active Nuclear Import of Human Immunodeficiency Virus Type 1 Preintegration Complexes, *Proc. Natl. Acad. Sci. USA*, 89(14), pp: 6580-6584 (Exhibit 10);
11. Bukrinsky, M. et al., (1993a) A Nuclear Localization Signal Within HIV-1 Matrix Protein that Governs Infection of Non-Dividing Cells, *Nature*, 365, pp:666-669 (Exhibit 11);
12. Burinsky, M. et al., (1993b) Association of Integrase, Matrix, and Reverse Transcriptase Antigens of Human Immunodeficiency Virus Type 1 with Viral Nucleic Acids Following Acute Infection, *Proc. Natl. Acad. Sci. USA*, 90, pp:6125-6129 (Exhibit 12);
13. Choudhury, I. et al., (1998) Inhibition of HIV-1 Replication by a Tat RNA-Binding Domain Peptide Analog, *Journal of Acquired Immune Deficiency Syndromes & Human Retrovirology*, 17(2), pp:104-111 (Exhibit 13);
14. Cullen B.R., (1993) Does HIV-1 Tat Induce a Change in Viral Initiation Rights?, *Cell*, 73(3), pp.417-420 (Exhibit 14);
15. Cullen, B.R., (1995) Regulation of HIV Gene Expression, *AIDS*, 9(suppl. A) pp:S19-S32 (Exhibit 15);

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16. Cullen, B.R., (1998) HIV-1 Auxiliary Proteins: Making Connections in a Dying Cell, *Cell*, 93, pp:685-692 (Exhibit 16);
17. de Noronha, C.M. et al., (2001) Dynamic Disruptions in Nuclear Envelope Architecture and Integrity Induced by HIV-1 Vpr, *Science*, 294, pp: 1105-1108 (Exhibit 17);
18. Depienne, C. et al., (2000) Cellular Distribution and Karyophilic Properties of Matrix, Integrase, and Vpr Proteins from the Human and Simian Immunodeficiency Viruses, *Experimental Cell Research*, 260, pp:387-395 (Exhibit 18);
19. Dubrovsky, L. et al., (1995) Nuclear Localization Signal of HIV-1 as a Novel Target for Therapeutic Intervention, *Molecular Medicine*, 1(2), pp:217-230 (Exhibit 19);
20. F.C.L. Almeida and S.J. Opella, (1997) fd Coat Protein Structure in Membrane Environments: Structural Dynamics of the Loop Between the Hydrophobic Trans-Membrane Helix and the Amphipathic In-Plane Helix, *J. Mol. Biol.*, 270, pp: 481-495 (Exhibit 20);
21. Friedler, A. et al., (1998) Backbone Cyclic Peptide, Which Mimics the Nuclear Localization Signal of Human Immunodeficiency Virus Type 1 Matrix Protein, Inhibits

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Nuclear Import and Virus Production in Nondividing Cells,
Biochemistry, 37, pp:5616-5622 (Exhibit 21);

22. Friedler, A. et al., (1999) Identification of a Nuclear Transport Inhibitory Signal (NTIS) in the Basic Domain of HIV-1 Vif Protein, *J. Mol. Biol.*, 289, pp:431-437 (Exhibit 22);
23. Gallay, P. et al., (1997) HIV-1 Infection of Nondividing Cells Through the Recognition of Integrase by the Importin/Karyopherin Pathway, *Proc. Natl. Acad. Sci. USA*, 94, pp:9825-9830 (Exhibit 23);
24. Goldfarb, D. and N. Michaud, (1991) Pathways for the Nuclear Transport of Proteins and RNAs, *Trends in Cell Biology*, 1, pp:20-24 (Exhibit 24);
25. Goldfarb, D.S. et al., (1986) Synthetic Peptides as Nuclear Localization Signals, *Nature*, 322, pp:641-644 (Exhibit 25);
26. Görlich, D., and I.W. Mattaj, (1996) Nucleocytoplasmic Transport, *Science*, 271, pp:1513-1518 (Exhibit 26);
27. Graessmann, M., and A. Graessmann, (1983) Microinjection of Tissue Culture Cells, *Methods in Enzymology*, 101, pp:482-493 (Exhibit 27);

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Page 6

28. Haffar, O.K., et al., (2000) Two Nuclear Localization Signals in the HIV-1 Matrix Protein Regulate Nuclear Import of the HIV-1 Pre-integration Complex, *J. Mol. Biol.*, 299, pp:359-368 (Exhibit 28);
29. Harrison, J.L. et al., (1996) Screening of Phage Antibody Libraries, *Methods in Enzymology*, 267, pp:83-109 (Exhibit 29);
30. Heinzinger, N.K. et al., (1994) The Vpr Protein of Human Immunodeficiency Virus Type 1 Influences Nuclear Localization of Viral Nucleic Acids in Nondividing Host Cells, *Proc. Natl. Acad. Sci. USA*, 91, pp:7311-7315 (Exhibit 30);
31. Jenkins, Y. et al., (1998) Characterization of HIV-1 Vpr Nuclear Import: Analysis of Signals and Pathways, *J. Cell Biol.*, 143(4), pp:875-885 (Exhibit 31);
32. Johnsson, K. and L. Ge, (1999) Phage Display of Combinatorial Peptide and Protein Libraries and Their Applications in Biology and Chemistry, *Curr. Top. Microbiol. Immunol.*, 243, pp:87-105 (Exhibit 32);
33. Karni, O. et al., (1998) A peptide Derived from the N-terminal Region of HIV-1 Vpr Promotes Nuclear Import on Permeabilized Cells: Elucidation of the NLS Region of the Vpr, *FEBS*, 429, pp:7151-7158 (Exhibit 33);

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Page 7

34. Koostra, N.A., and H. Schuitemaker, (1999) Phenotype of HIV-1 Lacking a Functional Nuclear Localization Signal in Matrix Protein of GAG and Vpr is Comparable to Wild-Type in HIV-1 Primary Macrophages, *Virology*, 253(2), pp:170-180 (Exhibit 34);
35. Laemmli, U.K., (1970) Cleavage of Structural Proteins during the Assembly of the Head of Bacteriophage T4, *Nature*, 227, pp:680-685 (Exhibit 35);
36. Lewis, P. et al., (1992) Human Immunodeficiency Virus Infection of Cells Arrested in the Cell Cycle, *The EMBO Journal*, 11(8), pp:3053-3058 (Exhibit 36);
37. Lewis, P.F. and M. Emerman, (1994) Passage through Mitosis Is Required for Oncoretroviruses but Not for the Human Immunodeficiency Virus, *Journal of Virology*, 68(1), pp:510-516 (Exhibit 37);
38. Luo, Z. et al., (1998) Structural Studies of Synthetic Peptide Fragments Derived from the HIV-1 Vpr Protein, *Biochemical and Biophysical Research Communications*, 244, pp:732-736 (Exhibit 38);
39. Nissam, A. et al., (1994) Antibody Fragments from a 'Single Pot' Phage Display Library as Immunochemical Reagents, *The EMBO Journal*, 13(3), pp:692-698 (Exhibit 39);

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40. Petit, C. et al., (2000) The Karyophilic Properties of Human Immunodeficiency Virus Type 1 Integrase Are Not Required for Nuclear Import of Proviral DNA, *Journal of Virology*, 74(15), pp:7119-7126 (Exhibit 40);
41. Piller, S. et al., (1996) Vpr Protein of Human Immunodeficiency Virus Type 1 Forms Cation-Selective Channels in Planar Lipid Bilayers, *Proc. Natl. Acad. Sci. USA*, 93, pp:111-115 (Exhibit 41);
42. Pollard, V.W. and M. H. Malim, (1998) The HIV-1 Rev Protein, *Annu. Rev. Microbiol.*, 52, pp:491-532 (Exhibit 42);
43. Popov, S. et al., (1998) Viral Protein R Regulates Nuclear Import of the HIV-1 Pre-Integration Complex, *The EMBO Journal*, 17(4), pp:909-917 (Exhibit 43);
44. Rasched, I. and E. Oberer, (1986) Ff Coliphages:Structural and Function Relationships, *Microbiological Reviews*, 50(4), pp:401-427 (Exhibit 44);
45. Schneider, J. et al., (1988) A Mutant SV40 Large T Antigen Interferes with Nuclear Localization of a Heterologous Protein, *Cell*, 54, pp:117-125 (Exhibit 45);
46. Simm, L.G. et al., (1993) Human Immunodeficiency Virus Type 1 DNA Synthesis, Integration, and Efficient Viral

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Page 9

Replication in Growth-Arrested T Cells, *Journal of Virology*, 67(7), pp:3969-3977 (Exhibit 46);

47. Thompson, J.D. et al., (1994) Clustal W: Improving the Sensitivity of Progressive Multiple Sequence Alignment Through Sequence Weighting, Position-Specific Gap Penalties and Weight Matrix Choice, *Nucleic Acids Research*, 22(2), pp:4673-4680 (Exhibit 47);
48. Truant, R. and B.R. Cullen, (1999) The Arginine-Rich Domains Present In Human Immunodeficiency Virus Type 1 Tat and Rev Function as Direct Importin β -Dependent Nuclear Localization Signals, *Molecular and Cellular Biology*, 19(2), pp:1210-1217 (Exhibit 48);
49. Wecker, K. and B.P. Roques, (1999) NMR Structure of the (1-51) N-terminal Domain of the HIV-1 regulatory protein Vpr, *Eur. J. Biochem.*, 266, pp:359-369 (Exhibit 49); and
50. Yuan, X. et al., (1990) Human Immunodeficiency Virus vpr Gene Encodes a Virion-Associated Protein, *AIDS Research and Human Retroviruses*, 6(11), pp:1265-1271 (Exhibit 50).

If a telephone interview would be of assistance in advancing prosecution of the subject application, applicants' undersigned attorney invites the Examiner to telephone him at the number provided below.

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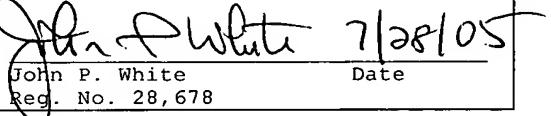
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Respectfully submitted,



John P. White
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Sheet 1 of 6

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Application Number	10/511,990
Filing Date	October 21, 2004
First Named Inventor	LOYTER Abraham
Art Unit	
Examiner Name	
Attorney Docket Number	73236

Sheet 1 of 6

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U. S. PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)				
	BA	WO 99/28338	06-10-1999	YISSUM RES CO	Pages 4,22	
	BB	WO 00/49038	08-24-2000	SCHUBERT ULRICH	Claims 2,7-11	

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Exhibit A

Substitute for form 1449/PTO				Complete if Known	
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	CA	Adam, S.A. et al. (1992) Methods in Enzymology 219, 97-110			
	CB	Agostini, I. et al. (2000) Exp Cell Res 259, 398-403			
	CC	Baeuerle, P.A., and D. Baltimore (1988) Science 242, 540-546			
	CD	Bailey, T.L., and C. Elkan (1994) Fitting a mixture model by expectation maximization to discover motifs. Proceedings of the Second International Conference on Intelligent Systems for Molecular Biology 28-36			
	CE	Baldrich-Rubio, E. et al. (2001) J Gen Virol 82(Pt5), 1095-106			
	CF	Bouyac-Bertoia, M. et al. (2001) Mol Cell 7(5), 1025-35			
	CG	Broder, Y.C. et al. (1997) FEBS Lett. 412, 535-539			
	CH	Bukrinsky, M. et al. (1992) PNAS USA 89(14), 6580-4			
	CI	Bukrinsky, M.I. et al. (1993a) Nature 365, 666-669			
	CJ	Bukrinsky, M. et al. (1993b) PNAS USA 90, 6125-6129			

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	CK	Choudhury, I., J. Wang, et al. (1998) Journal of acquired immuno-deficiency syndromes and human retrovirology 17, 104-111			
	CL	Cullen, B.R. (1993) Cell 73(3), 417-20			
	CM	Cullen, B.R. (1995) Aids 9, S19-32			
	CN	Cullen, B.R. (1998) Cell 93, 685-692			
	CO	de Noronha, C. M. et al. (2001) Science 294(5544): 1105-8			
	CP	Depienne, C. et al. (2000) Exp Cell Res 260, 387-395			
	CQ	Dubrovsky, L. et al. (1995) Molecular Medicine 1(2), 217-230			
	CR	F.C.L. Almeida and S.J.Opella (1997) J. Mol. Biol. 270, 481-495			
	CS	Friedler, A. et al. (1998) Biochemistry 37, 5616-5622			
	CT	Friedler, A. et al. (1999) J Mol Biol 289, 431-437			

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	CU	Gallay, P. et al. (1997) Proc. Natl. Acad. Sci. USA 94, 9825-9830	
	CV	Goldfarb, D., and N. Michaud (1991) Trends Cell Biol. 1, 20-24	
	CW	Goldfarb, D.S. et al. (1986) Nature 322, 641-644	
	CX	Gorlich, D., and I.W. Mattaj (1996) Science 271, 1513-1518	
	CY	Graessmann, M. and A. Graessmann (1983) Methods Enzymol. 101, 482-92	
	CZ	Haffar, O.K. et al. (2000) J Mol Biol 299, 359-68	
	DA	Harrison, J.L. et al. (1996) Methods in Enzymology 267, 83-109	
	DB	Heinzinger, N.K. et al. (1994) Proc. Natl. Acad. Sci. USA 91, 7311-7315	
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	DE	Karni, O. et al. (1998) FEBS Let. 429:421-425	
	DF	Koostra, N.A., and H. Schuitemaker (1999) Virology 253(2), 170-180	
	DG	Laemmli, U.K. (1970) Nature 277, 680-685	
	DH	Lewis, P. et al. (1992) EMBO J 11, 3053-3058	
	DI	Lewis, P.F., and Emerman, M. (1994) J. Virol. 68, 510-516	
	DJ	Luo, Z. et al. (1998) BBRC 244, 732-736	
	DK	Nissim, A. et al. (1994) EMBO J 13, 692-698	
	DL	Petit, C. et al. (2000) J Virol 74(15), 7119-26	
	DM	Piller, S.C. et al. (1996) Proc Natl Acad Sci 93, 111-115	
	DN	Pollard, V.W., and M.H. Malim (1998) Annu. Rev. Microbiol. 52, 491-532	

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Sheet

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		Complete if Known	
		Application Number	10/511,990
		Filing Date	October 21, 2004
		First Named Inventor	LOYTER Abraham
		Art Unit	
		Examiner Name	
		Attorney Docket Number	73236

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	DO	Popov, S. et al. (1998) EMBO J 17, 909-917	
	DP	Rasched, I., and E. Oberer (1986) Microbiol. Rev. 50(4), 401-27	
	DQ	Schneider, J. et al. (1988) Cell 54, 117-125	
	DR	Simm, L.G. et al. (1993) J Virol 67(7), 3969-77	
	DS	Thompson, J.D. et al (1994) Nucl. Acids Res. 22, 4673-4680	
	DT	Truant, R., and B.R. Cullen (1999) Mol Cell Biol 19, 1210-1217	
	DU	Wecker, K., and B.P. Roques (1999) Eur J Biochem 266, 359-369	
	DV	Yuan, X. et al. (1990) AIDS Res and Human Retroviruses 6(11), 1256-71	

Examiner Signature	Date Considered
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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